

Cont. of Application Number: 09/739,905

Filing Date: June 24, 2003

Attorney Docket Number: 04329.2470-01

second insulating layer by use of a reactive gas containing carbon atoms and at least one of oxygen atoms, hydrogen atoms and nitrogen atoms.--

IN THE SPECIFICATION:

Please replace the paragraphs beginning on page 4, line 15, and ending on page 9, line 19, with the following new paragraphs:

-- A dry etching method according to a first aspect of the invention comprises: sequentially laminating a first insulating layer containing carbon and a second insulating layer containing carbon on a substrate; patterning the second insulating layer to form a mask; forming grooves in the first insulating layer by etching the first insulating layer with the second insulating layer used as a mask such that each of the grooves has a side surface and a bottom surface in the first insulating layer; and removing the second insulating layer by use of a reactive gas containing carbon atoms and at least one of oxygen atoms, hydrogen atoms and nitrogen atoms.

A semiconductor device manufacturing method according to a second aspect of the invention comprises: sequentially laminating an insulating layer and a photoresist each containing carbon on a semiconductor substrate; patterning the photoresist to form a mask; forming interconnection grooves in the insulating layer by etching the insulating layer with the photoresist used as a mask such that each of the interconnection grooves has a side surface and a bottom surface in the insulating layer; ashing and removing the photoresist by use of a gas containing carbon atoms and at least one of oxygen atoms, hydrogen atoms and nitrogen atoms; and depositing a metal interconnection layer in the interconnection grooves to form interconnections therein.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com